

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method, comprising:
identifying an infarct region within a ventricle of a human subject; ~~and~~
applying a pacing therapy to the ventricle to pre-excite the infarct region to contract during systole at a time before contraction of the ventricle initiated by the His Purkinje conduction network; and
percutaneously delivering donor cells comprising α -1,3-galactosyltransferase (GGTA1) knock out swine cells to the infarct region within the ventricle of the human subject, ~~wherein the knock out swine cells do not express α -1,3-galactosyltransferase (GGTA1) and wherein the~~ knock out swine cells stimulate a beneficial response within the ventricle.
2. (Canceled)
3. (Currently Amended) The method of claim 1, wherein the donor cells are diploid and both chromosomal copies of a gene for α -1,3-galactosyltransferase of a donor cell have been disrupted.
4. (Canceled)
5. (Currently Amended) The method of claim 1, wherein delivering comprises delivering an effective amount of donor cells to structurally reinforce infarct region, wherein the effective amount is in a range of between 1 μ L and 1 mL.
6. (Previously Presented) The method of claim 1, wherein the donor cells replace damaged cells in and around the infarct region.
7. (Previously Presented) The method of claim 1, wherein delivery of the donor cells occurs within 2 weeks of a myocardial infarction (MI).

8. (Currently Amended) The method of claim 1 wherein an expression vector comprising the donor cells comprise complementary DNA a nucleic acid encoding a detectable polypeptide carried by the donor cells that is operably linked to a promoter.

9-18. (Canceled)

19. (Currently Amended) A method, comprising:
identifying an infarct region within a ventricle of a subject;
applying a pacing therapy to the ventricle to pre-excite the infarct region to contract during systole at a time before contraction of the ventricle initiated by the His Purkinje conduction network; and
percutaneously delivering at least one ~~structurally reinforcing component~~ immunotolerant cell line to the infarct region after applying the pacing therapy.

20. (Currently Amended) The method of claim 19, wherein the at least one ~~structurally reinforcing component~~ immunotolerant cell line comprises donor cells from a non-antigenic cell line of swine cells that do not express α -1,3-galactosyltransferase (GGTA1).

21. (Previously Presented) The method of claim 19, wherein the pacing therapy comprises a bradycardia pacing algorithm.

22. (Previously Presented) The method of claim 19, further comprising modifying the pacing therapy based upon a sensed measurement.

23-62 (Canceled)

63. (Previously Presented) The method of claim 22, wherein the sensed measurement comprises wall motion during the cardiac cycle.

64. (Previously Presented) The method of claim 22, wherein the sensed measurement comprises impedance signals from a paced region and a non-ischemic region.
65. (Previously Presented) The method of claim 22, wherein the sensed measurement comprises a change in a wall thickness of a paced region.
66. (Previously Presented) The method of claim 1, wherein the donor cells comprise stem cells.
67. (Previously Presented) The method of claim 20, wherein the donor cells comprise stem cells.
68. (Currently Amended) The method of claim 19, wherein the ~~structurally reinforcing component~~ immunotolerant cell line has a property that stimulates a healing response in the ventricle.
69. (New) The method of claim 22, wherein the modifying comprises one increasing or reducing the pacing.
70. (New) The method of claim 1, wherein the pacing therapy comprises a bradycardia pacing algorithm.
71. (New) The method of claim 5, wherein the range is one of between 1 μ L and 300 μ L, between 1 μ L and 100 μ L or between 1 μ L and 50 μ L.
72. (New) The method of claim 5, wherein the effective amount is applied in multiple doses.